

NOTE

Range Extensions for the Ant *Leptothorax pergandei* (Hymenoptera: Formicidae):  
A Mesic Forest Species Discovered in the Chihuahuan Desert

*Leptothorax pergandei* Emery was recently evaluated, and determined to be a single, highly variable species (MacKay, W. 1993, *Sociobiology* 21: 287–297). This species normally occurs in shaded deciduous forests or shaded prairie sites of eastern United States, as far west as Nebraska, Kansas, Oklahoma and Texas, and as far north as Iowa (MacKay 1993, loc. cit.). We were thus very surprised to find this species in the Chihuahuan Desert in Arizona and in New Mexico, the first records of this species from both states and from such arid habitats.

This species was collected at two localities in Arizona. The first site is the Chiricahua Mountains, Cochise Co., 6.4 km WNW Jct. National Forest road 42 with National Forest road 42B, elevation 1580 m, 11-viii-1992 (Silver Creek Valley near Paradise). The area consists of a grazed, grassy meadow surrounding a wash with scattered oaks (*Quercus gambelii*) and junipers (*Juniperus monosperma*) up to 5 m tall. Other shrubs include rabbitbush (*Chrysothamnus* sp.) and Hopi tea (*Thelesperma megapotamicum*). The soil is fine textured with moderate to heavy clay. The *L. pergandei* nests are cryptic and fully exposed to the sun [vouchers in Museum of Comparative Zoology]. It is common in this area; 45 nests were collected and far more nests were seen. The second Arizona site is Graham Co., 14 mi. S Safford, ix-13-1976, leg. D. S. Chandler, from sweeping low vegetation [1 specimen in Univ. of Ariz., Tucson, collection].

The first site of two New Mexico collections is Hidalgo Co., San Simon Valley, 1 km W Jct. Rt. 80 on Rt. 533 (Portal Rd.), elevation 1250 m, 2-viii-1988 and 15-vii-

1992. The area consists of open, grazed Chihuahuan Desert scrub with scattered mesquite, *Ephedra* sp., patches of *Hilaria mutica*, creosotebush (*Larrea tridentata*) and mesquite (*Prosopis glandulosa*). The soil has a moderate to heavy clay component and parts of the area tend to accumulate water temporarily during summer rain events. *Leptothorax pergandei* nests are cryptic, consisting of tiny, bare holes in bare soil or in grass clumps, in areas fully exposed to the sun [vouchers in MCZ]. The second site in southern New Mexico is Doña Ana Co., 45 km NE Las Cruces. It is a typical creosotebush (*Larrea tridentata*) scrub community. A single worker was collected in a pitfall trap, 24-vi-1984 [voucher in Laboratory for Environmental Biology, UTEP].

This species is apparently not common in the Chihuahuan Desert. We have done extensive collecting in Arizona and New Mexico for over 17 years and these are the only Chihuahuan Desert collections we have for this species. In two of the localities (first and third listed), this species is abundant, nesting in open, sun-baked desert sites as if it were the "normal" habitat for this species. We have not collected it in more mesic sites in the two states, despite extensive collecting in such habitats.

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